Solution-Soft

Time Machine® Synchronizes Application Time with Mainframe, Resolves Expensive Time & Date Glitches

Swedish Bank

This end-user is the largest financial services group in the Nordic and Baltic region. It holds leading positions in corporate and institutional banking, as well as retail and private banking. It is also the leading provider of life and pension products in the Nordic countries. It provides services in 12 countries and for more than 100,000 customers in the Nordic countries, the Baltic countries and throughout Europe.

Challenge: Synchronize time between servers and mainframe

It's crucial for the IT team to deploy reliable and secure Midas banking application platform to maintain financial security and stability, provide excellent service, customized solutions and confidentiality for important financial issues for their customers.

Midas is the "Bank consolidated Java platform" which is a broad range of areas of the bank that are covered by the applications (Netbanking, Life & Pension, Treasury, Markets, etc.) On Midas, there are more than 100 systems running - from really small and simple applications (one or a few single occasional users) to really big and complex applications (such as Private Netbanks, Corporate Netbanks, and the bank's SOA implementation - thousands of simultaneous users 24x7, with high SLA requirements).

Private Netbank Sweden has parts running on the Midas Windows servers, as well as transactions and batches running on the IBM mainframe. The system date and time on both the Midas server and the mainframe are synchronized against an atomic clock, so Midas and the mainframe should have the same date and time. However, on top of the mainframe system clock (TOD, or Time-of-Day), there is another layer called TIC TOC, or IBM Application Time Facility as it is called nowadays. TIC TOC is used to change the date and/or time for a job, transaction or batch for different reasons. For example, they need to test certain situations such as turn of a year, or end of quarter.

The most prominent use, however, is to change the date backwards since batch jobs encounter errors approximately every third day. When these errors occur, the batches have to be re-run the next day. When this situation occurs, the TIC TOC date is set back one day. In the long run, this accumulates, so that certain IMS transactions are 10-12 months behind the real date.

Quote

"We have Time Machine in use in our test environment. Our test Midas environment is dependent on services running on a test IBM mainframe. The problem is that this mainframe is lagging behind in time so we need to adjust our test banking application on Midas, to run the same date, in order to fully test all functionality in the banking application. I can confirm that Time Machine has performed as expected and we are pleased with it."

Senior Infrastructure Specialist
Swedish Bank

For Private Netbank Sweden, this means scheduled payments that are registered to be paid today will not be handled in the mainframe, because that payment date is 10-12 months in the future. Many other systems/applications, such as Corporate Netbank, have the same problem. The whole of the bank's IT is impacted significantly by the costly and time consuming issue of time synchronization frequently across many of their critical systems and applications.

Time Machine Solution

After evaluating the Time Machine solution, the Project lead and the team all agreed it's the ultimate solution to overcome the ever increasing challenges to sync the "payment date" in the mainframe database as well as to ease the deployment of adding other non-Midas servers which are running on the same date and time as the mainframe.

Windows based banking system (Midas) which interfaces with the Mainframe system runs on a date in the past while other environmental requirements the mainframe current date & time, Time Machine is used to simulate this past date for functional test cases in their Windows environment for the Midas and allows other environments to remain unaffected.

Now synchronizing the time with the mainframe is a breeze with Time Machine. No more errors, complicated work arounds or prolonged delays; with one click of the mouse, time synchronization with the mainframe is done and there is no need for the IT administrators to be

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